KENTUCKY FORESTS

Blue Grass Unit

FOREWORD

More than a decade has elapsed since the last comprehensive inventory of Kentucky's woodlands. Timber cutting, tree growth, and shifts in land use since then have led to several important changes in the timber resource. The demand for forest products has also changed. Recent emphasis on rural area development has made the necessity for fresh statistics even more pressing. Local communities and forest-based industries are finding a greater need for up-to-date data as they plan for future economic development. So, there is an urgent need for new information.

To meet these needs, the Division of Forestry of the Kentucky Department of Natural Resources and the U.S. Forest Service planned and conducted a new inventory of Kentucky forests. The field work was completed in 1964.

The McSweeney-McNary Forest Research Act of 1928 authorizes the Forest Service to complete a statewide forest inventory of Kentucky at approximate 10-year intervals. This is part of the nationwide program of maintaining a current account of our timber resources. The State of Kentucky appropriated $120,000 for the current survey. This contribution, supplementing the Federal funds available for a regular survey, made it possible to intensify the inventory. As a result, we can provide the kind of detailed information needed for making long-range plans to meet future demands and in addition help local communities and forest-based industries make more efficient use of the forest resource.

Clarence D. Chase, Leader of the Survey Project at the Lake States Forest Experiment Station, directed the inventory. Field survey units of the Kentucky Division of Forestry and the Lake States Station collected the basic inventory data. The Lake States Station computed and tabulated the final statistics and the Central States Forest Experiment Station analyzed and reported the results.

Other organizations made important contributions to the new inventory. Personnel of the Eastern Region of the U.S. Forest Service inventoried and provided statistics for the Cumberland National Forest. The Northeastern Forest Experiment Station assisted with the computation of National Forest data. The Tennessee Valley Authority provided men and equipment to assist in surveying areas of their interest. The Soil Conservation Service and the Agricultural Stabilization and Conservation Service provided the field crews with office space and up-to-date aerial photographs. The Kentucky Department of Highways took and provided aerial photographs for parts of eastern Kentucky where no recent photographs were available. The University of Kentucky and Kentucky Department of Commerce took an active part in planning and gave valuable assistance with problems that evolved during the course of the inventory. Our thanks go to all these organizations and others who contributed.

For sampling and reporting purposes, the State was divided into seven survey units (frontispiece). This report covers the Blue Grass Unit. Additional information regarding the survey can be obtained from either the Division of Forestry, Kentucky Department of Natural Resources, or the Central States Forest Experiment Station.

Central States Forest Experiment Station, U.S. Dept. of Agriculture
Forest Service, 111 Old Federal Building, Columbus, Ohio
R. D. Lane, Director

CS-7
Archives

KENTUCKY FORESTS

Blue Grass Unit

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Prepared in cooperation with

Division of Forestry, Kentucky Department of Natural Resources

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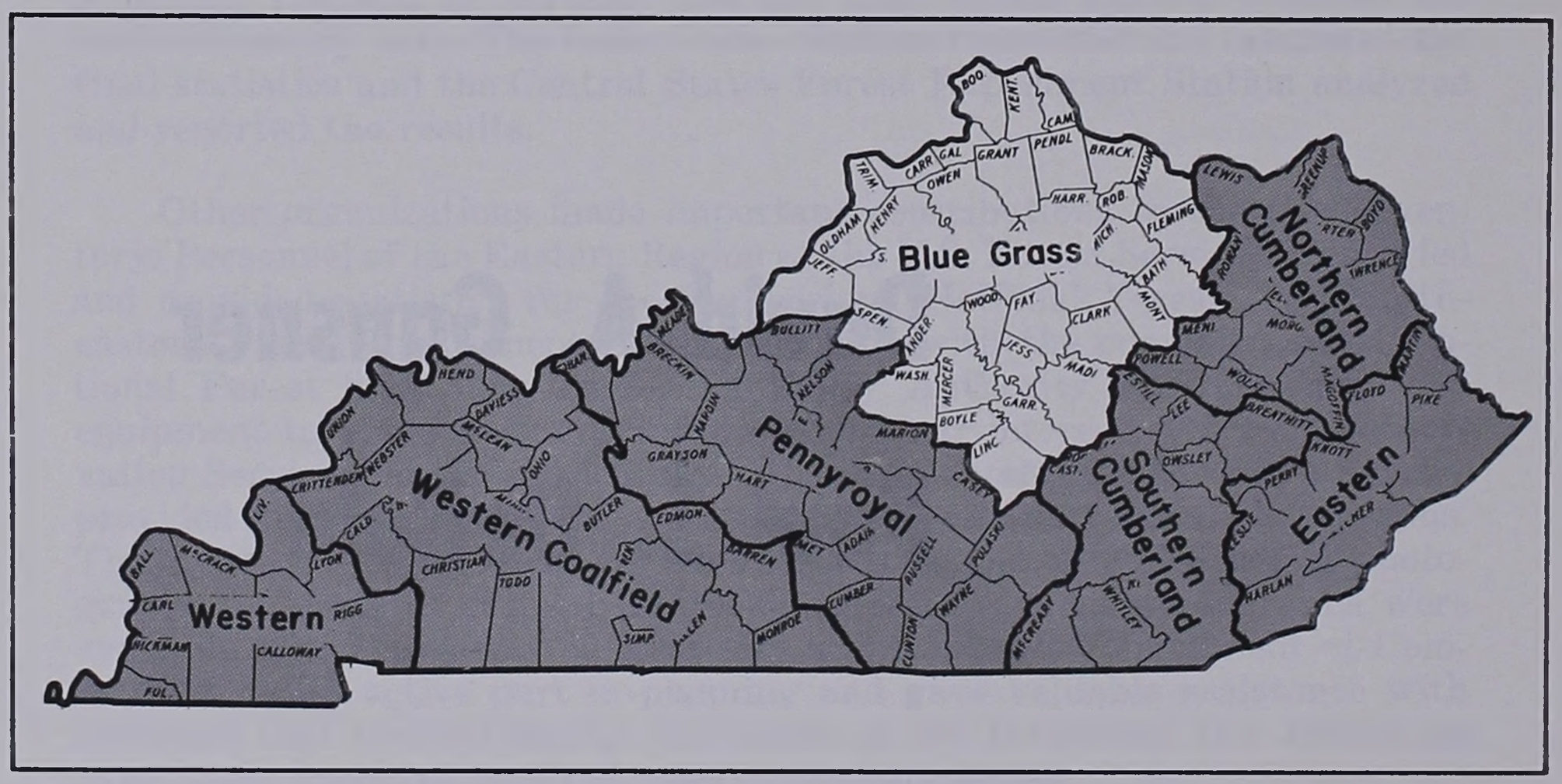

Location of the Blue Grass Unit in Kentucky.

THE TIMBER RESOURCE HAS CHANGED

The Blue Grass Unit of Kentucky is the most highly developed area of the State. Most of the original woodland has long since given way to agriculture, industry, and urbanization so that today only one-fifth of the total land area remains in forest. While the Blue Grass includes more than 20 percent of Kentucky's gross area, less than 10 percent of the State's forest is found here.

There are 1.1 million acres of forest land in the region, 7 percent less than at the time of the forest inventory of 1949. Less than 1 percent of this forest is classified noncommercial. Most of the noncommercial forest is found on dry ridgetops, knobs, and other sites considered too poor for timber production. The remainder is woodland in State parks and other such areas where timber harvesting is prohibited.

Generally speaking, counties on the outer fringe of the region are more heavily forested than in the interior where high soil fertility and a gentle topography permit intensive use of the land for pasture and field crops. Fayette and Bourbon Counties are the least forested counties in Kentucky (fig. 1).

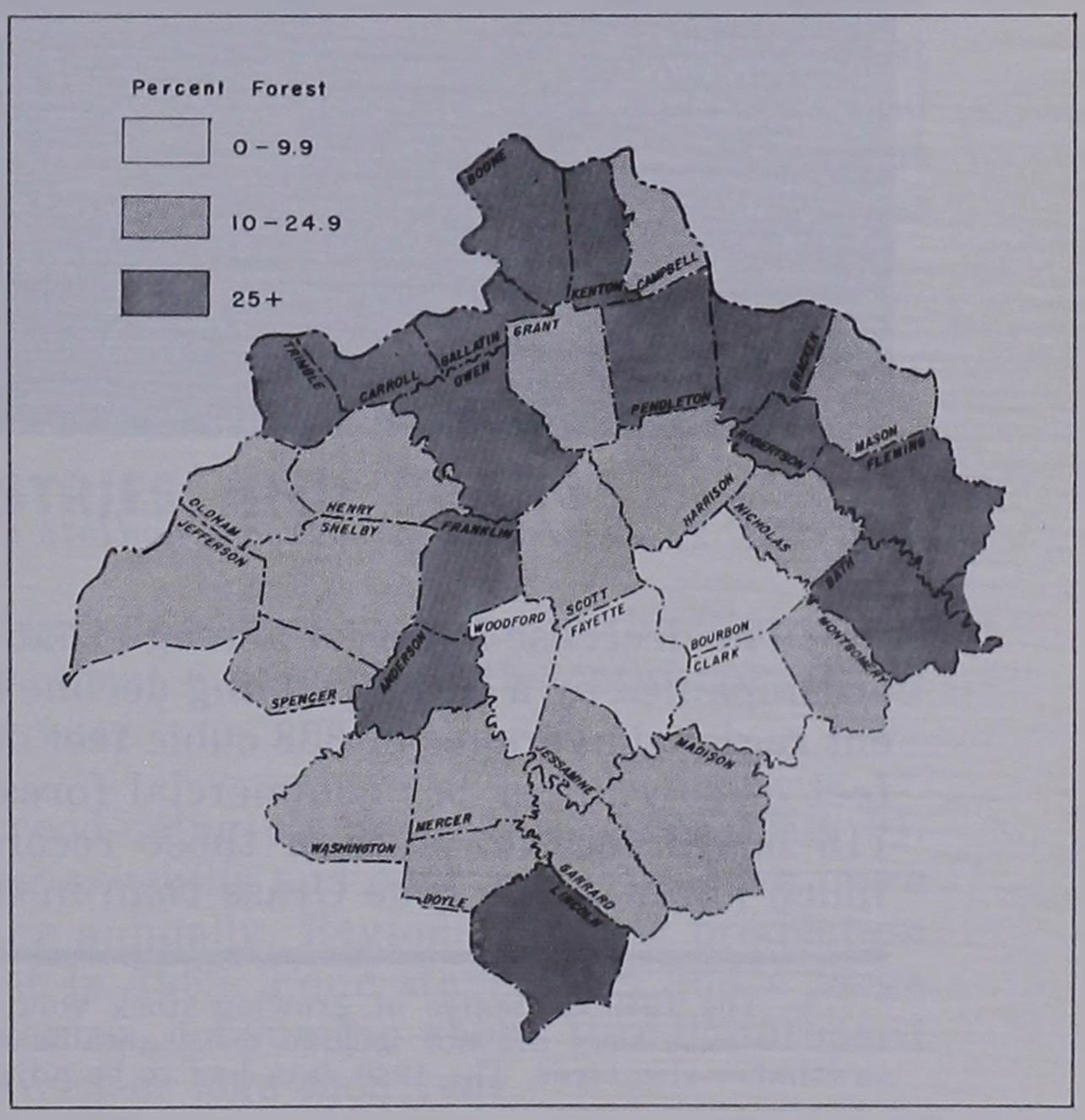

FIGURE 1. — Percent of forest land by counties.

Hardwood trees predominate in most stands, with almost three-fifths of the commercial forest either in the oak-hickory or central mixed hardwood types. Redcedar also occurs frequently, as evidenced by the substantial acreage of redcedar-hardwood stands. Two-fifths of Kentucky's redcedar-hardwood forest occurs in this region.

Blue Grass timber is smaller than average for Kentucky. More than 80 percent of the merchantable volume is in trees less than 15.0 inches d.b.h. and stands that are poletimber and seedling and sapling size account for more than three-fourths of the commercial forest area. Practically all of the woodland is privately owned, much of it in small scattered farm woodlots which are poorly stocked and heavily grazed (fig. 2)

FIGURE 2. — Heavily pastured woodlots are a common sight in the Blue Grass Unit.

The decrease in forest acreage that took place between inventories was accompanied by a corresponding decline in timber volume (fig. 3). The present regional averages of 338 cubic feet of total growing stock and 926 board feet of sawtimber per commercial forest acre are about 70 cubic feet and 115 board feet lower than those recorded in 1949.[1] Average stocking is much lower in the Blue Grass than in the other survey units of the State.

[1] The 1949 estimates of growing-stock volume are not directly comparable with those of 1963 because they did not include merchantable material in the upper-stem portion of hardwood sawtimber-size trees. The 1949 data had to be adjusted to permit comparisons.

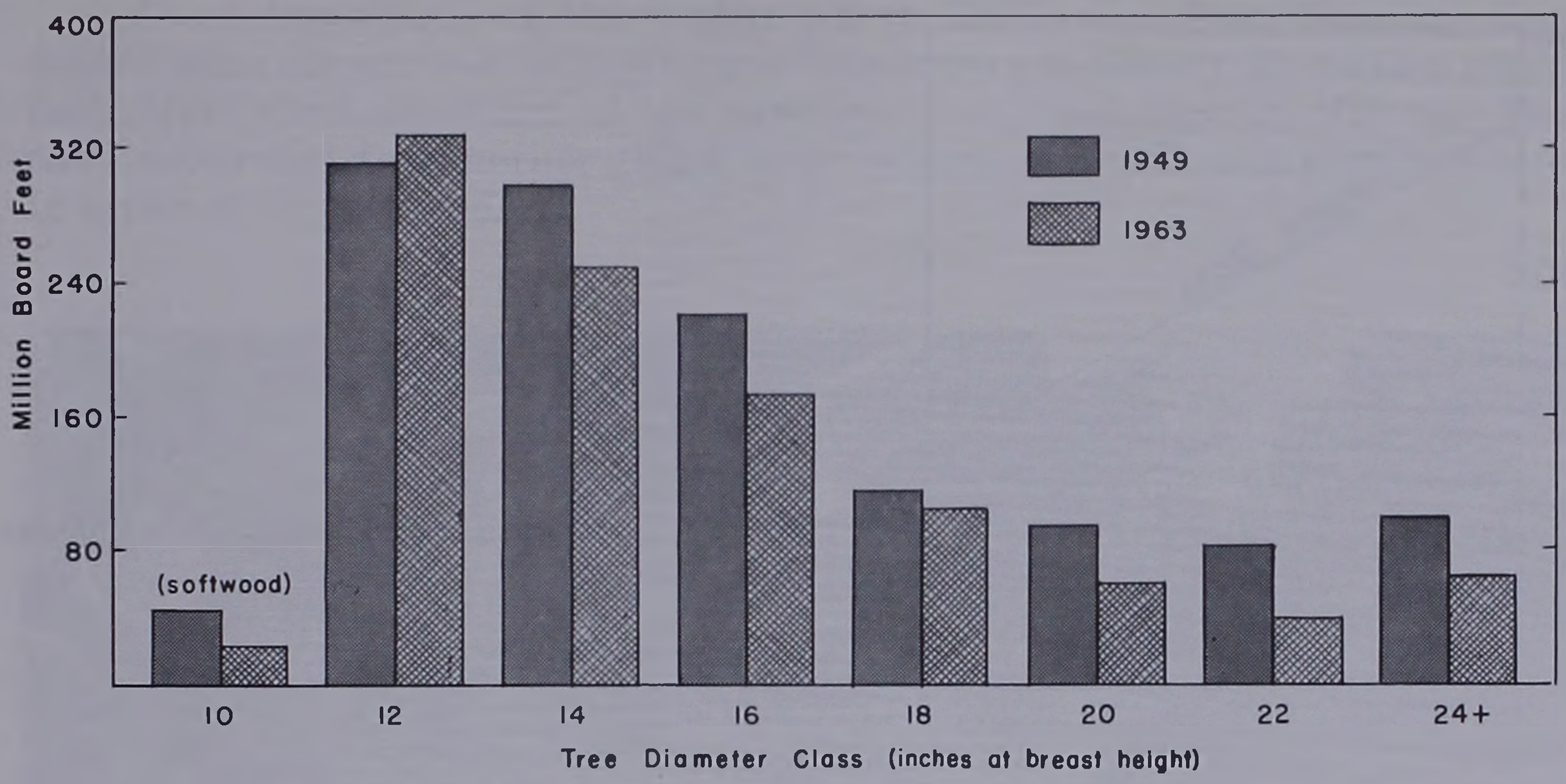

FIGURE 3. — Change in volume of sawtimber by diameter class, 1949-1963.

There have been some important shifts in the species composition of Blue Grass forests (fig. 4). Oak volume is down but still accounts for about two-fifths of the total inventory. Hickory timber has increased and ranks next to the oaks in abundance. The remaining volume is well distributed among a variety of species. In spite of sharp declines, there are still some 30 million board feet of black walnut sawtimber in the commercial forests of the region. This is 16 percent of the total State inventory of this highly prized species. A large amount of the region's black walnut timber was not tallied by the forest inventory because it grows in fence rows, pastures, and other such areas developed for nonforest uses. The volume of black walnut sawtimber found on these nonforest holdings is estimated to be about as great as that found in the commercial forests.

TIMBER INDUSTRIES AND DRAIN

About 7.5 million cubic feet of growing stock were cut in the Blue Grass region during 1962. This was only about 6 percent of the total harvest of timber from Kentucky during that year.

There are some 60 primary wood-using plants in the region (fig. 5). Most of them are lumber-producing sawmills and only a few produce more than a million board feet of lumber annually. Regional lumber production totaled about 17 million board feet in 1962. Four stave mills and a large veneer mill are also active in the region, consuming about 10 million board feet of high-quality cooperage and veneer logs each year.

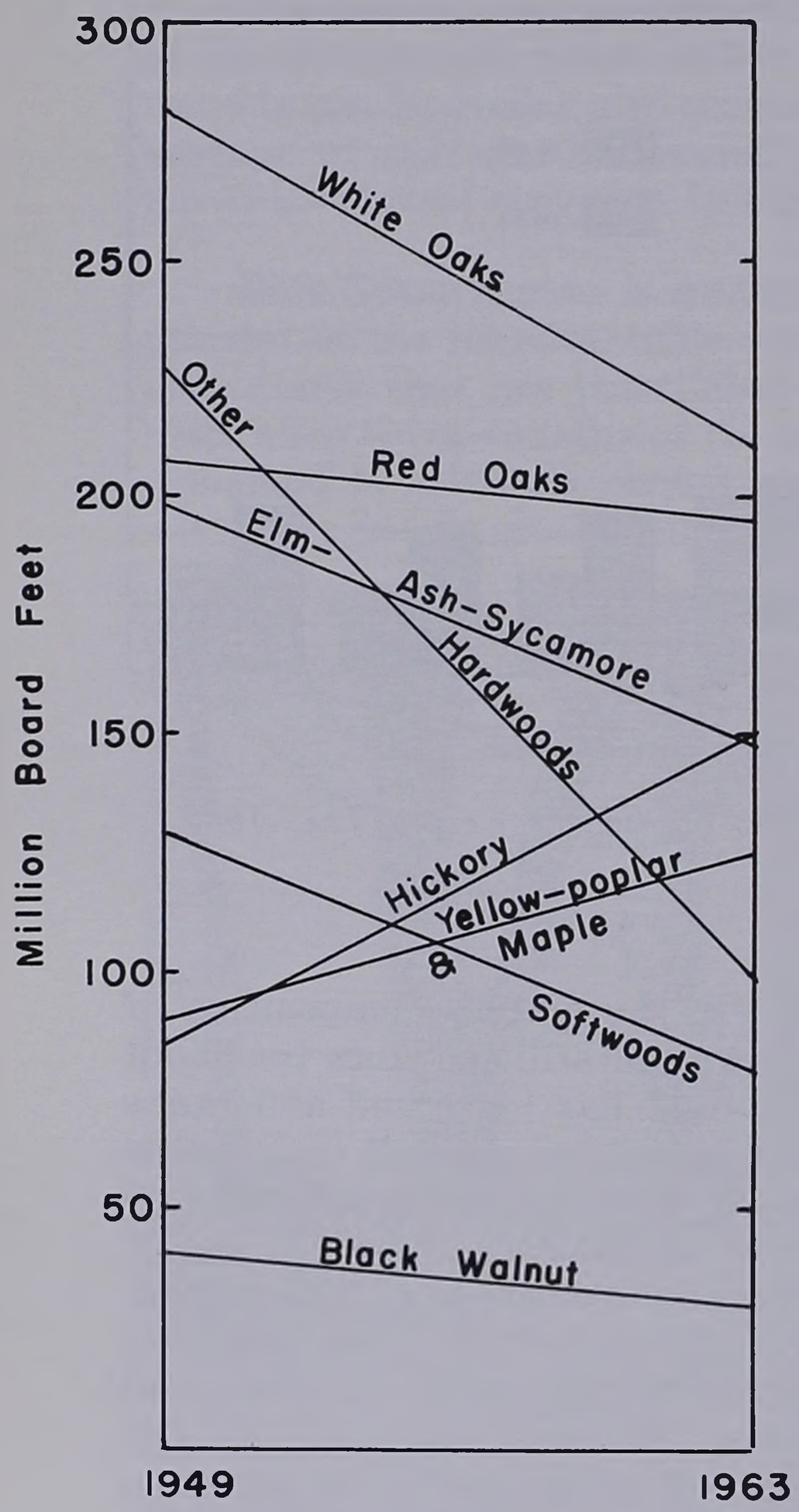

FIGURE 4. — Change in sawtimber volume by species groups, 1949-1963.

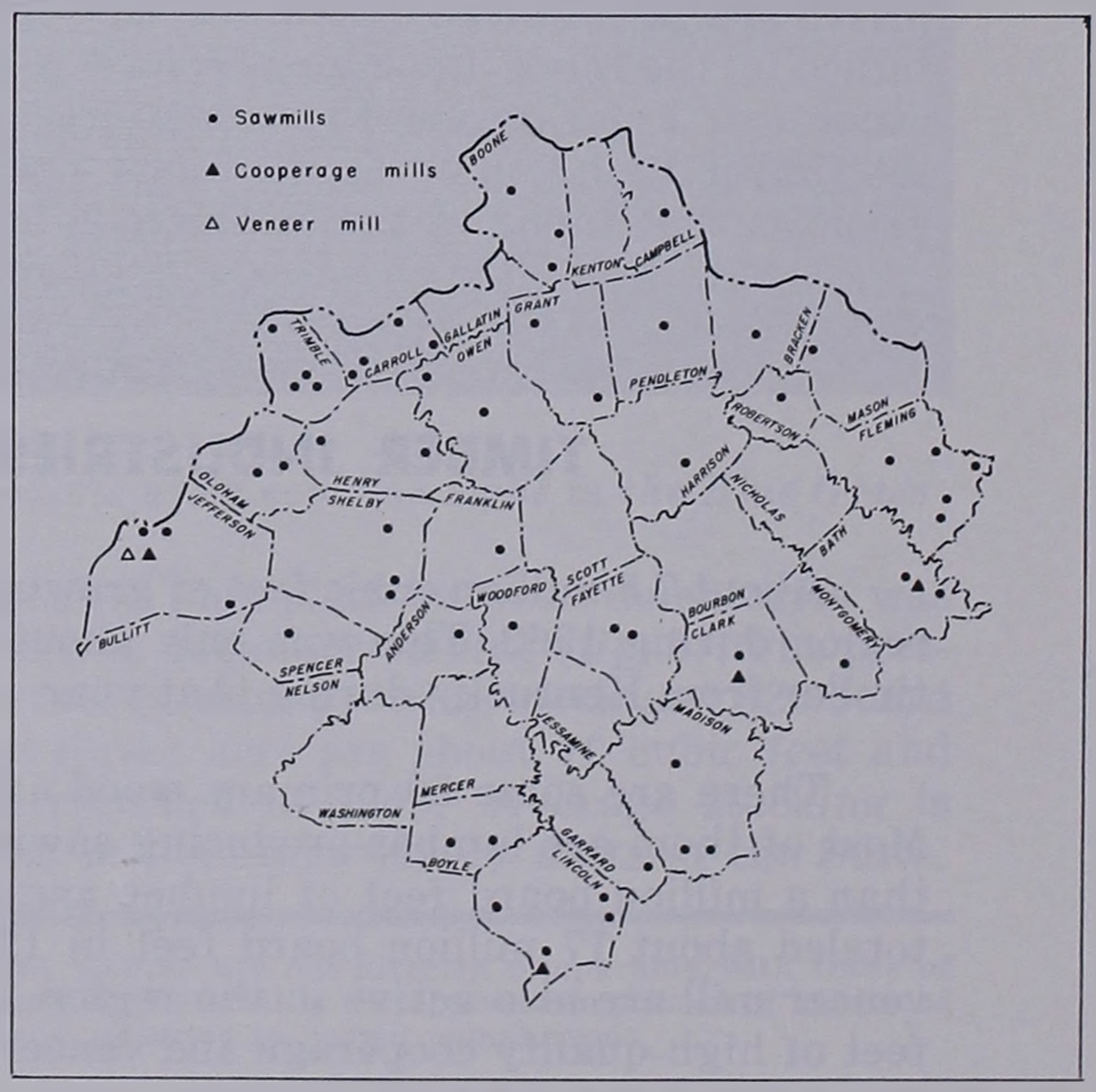

FIGURE 5. — Location of primary wood-using industries, 1963.

About two-thirds of the timber cut in 1962 came from trees of sawtimber size, the harvest of sawtimber amounting to almost 30 million board feet. More than one-third of the sawtimber cut was walnut (fig. 6). The oaks accounted for another third, and hickory and yellow-poplar followed in order of importance.

FIGURE 6. — Half of Kentucky's 1962 harvest of black walnut timber came from this region.

THE CURRENT BALANCE BETWEEN GROWTH AND CUT

The net annual growth of growing stock in the Blue Grass region is 25 million cubic feet or 6.5 percent of the inventory before allowances are made for cutting (fig. 7). Sawtimber is growing at a rate of 95 million board feet or 9.1 percent per year. Percentage growth rates are high compared with those recorded in other regions of Kentucky, primarily because the volume base upon which the rates are computed is smaller. But volume-growth rates per acre are much lower than in the rest of the State. Annual growth per commercial forest acre averages 22 cubic feet of growing stock and 84 board feet of sawtimber. Practically all of the region's forests have the potential to produce more than 50 cubic feet of growing stock per acre per year (potential expressed in terms of mean annual growth at culmination of increment in fully stocked stands of desirable trees). However, less than one-fourth of the region's forest is well stocked with merchantable or potentially merchantable trees. Further, only 7 percent of the forest is in a highly productive condition, i.e., well stocked with desirable crop trees or expected to attain such stocking in the near future.

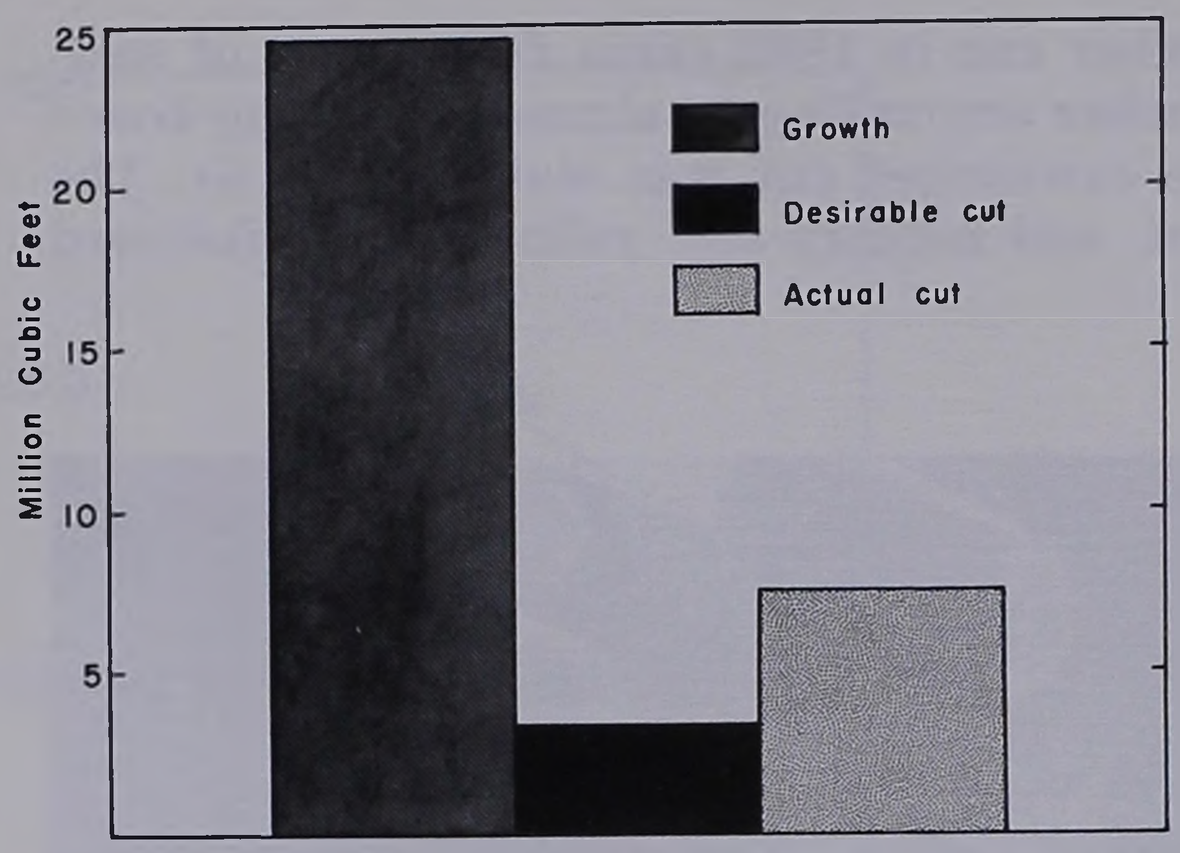

FIGURE 7. —. Growth, desirable cut, and actual cut of growing stock, 1963.

Even though volume growth is below potential, it still exceeds the present cut. A comparison of current growth (1963) and cutting (1962) data indicates that total growing-stock volume is increasing about 4.5 percent and sawtimber volume about 6 percent annually. The ratio of volume growth to volume cut is much higher for small and low-grade material than it is for large, high-quality stock.

Growth exceeds cut for most of the important-timber species. One noticeable exception is black walnut for which the cut greatly exceeds the growth.

CURRENT HARVEST EXCEEDS THAT RECOMMENDED FOR SUSTAINED PRODUCTION

A desirable cut of about 3 million cubic feet of growing stock has been estimated for the Blue Grass Unit. This is the volume that should be removed annually during the next decade in harvest cuts and commercial thinnings. The aim of the desirable cut is to improve timber productivity with the long-range goal of establishing a regulated forest producing a sustained yield of timber. Desirable cut provides a silvicultural standard that can be compared with actual cutting to show where shortages and surpluses occur in the timber supply.

The harvest of growing stock from the region in 1962 was more than twice the desirable cut and nearly all species and sizes of timber were over cut (fig. 7). Actually, the large deficit is due more to a low desirable cut than it is to heavy cutting. Most of the region's stands are immature and poorly stocked and only a small percentage of them will be ready for harvest or require a commercial thinning during the next decade (fig. 8). It would be desirable, from a silvicultural standpoint, to reduce cutting temporarily until timber stocking improves and a more balanced distribution of age classes is achieved.

FIGURE 8. — Most of the region's woodland is immature and poorly stocked.

Comparisons of desirable cut with actual cut indicate that the annual harvest of hickory sawtimber could be expanded about 1 million board feet if markets for this volume were available. But most other species are cut too heavily (fig. 9). The huge black walnut deficit is particularly alarming and if the current trend continues, supplies of this valuable timber species will soon be depleted.

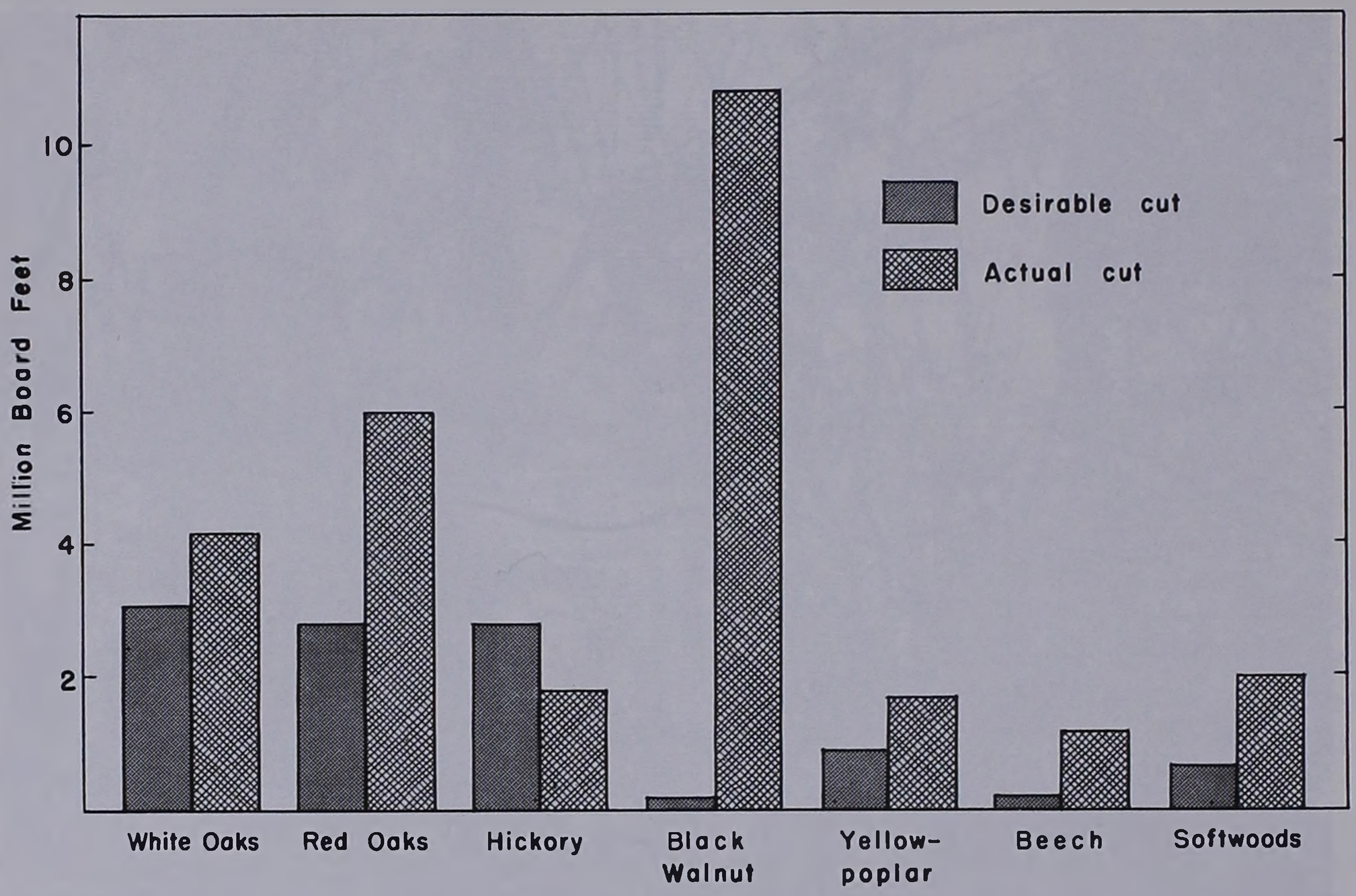

FIGURE 9. — Desirable cut and actual cut of sawtimber for selected species, 1963.

APPENDIX

Forest Survey Procedure

The resource statistics presented in this report were obtained from two sources: a timber-management-plan forest inventory of the Cumberland National Forest and a survey of all other forest land. Both were sampling surveys designed to yield reliable statistics for large areas. Both combined aerial photo interpretation and field work to minimize costs. Both employed electronic data-processing machines to reduce computing time and generate more usable statistics than could be done by hand methods.

To attain specific levels of statistical accuracy, triple sampling was used. A large number of points were first examined on aerial photographs to determine the proportions of forest and nonforest land. One-fourth of the forest points were stereoscopically classified as to forest type, stand size, stocking, and site. One-twelfth of these points were in turn examined on the ground. The ground classification provided a check on photo classification and a means of improving estimates of forest area.

At each forest ground-check point a plot was established. Trees were classified and measured as a basis for estimating timber volume, growth, mortality, and quality. Ownership was determined for each plot.

Timber-cut information was based on forest-industry production records for 1962, on stump counts at forest-inventory plots, cutting records from large owners, and utilization factors based on a logging-residue study.

Accuracy of Survey Estimate

Estimates of forest area and timber volume are subject to two kinds of errors: (1) nonsampling errors caused by mistakes in judgment, recording of measurements, or in calculations, and (2) sampling errors inherent in statistical work.

Nonsampling errors are not measurable and cannot be shown. They are avoided as much as possible through training of personnel, close supervision, and careful checking of all phases of the work.

Sampling errors are subject to the laws of chance and may be estimated by statistical methods. These errors are held to acceptable levels commensurate with the values involved and funds available by adjusting the survey design and the intensity of the sample. With a probability of two out of three (that is, relatively good) the accompanying table shows the accuracy of the data presented in this report. The sampling error of a survey is less for a large class or block than for a smaller class or other subdivision. Some of the resource statistics presented in this report have such large errors that it would be unwise to use them alone — but if they are combined with other figures the error may be reduced enough to warrant their use. Weak figures are shown to allow various combinations of data.

Guides for judging accuracy by size of area and by volume of growing stock and sawtimber

Commercial-forest land	Standard error of sampling	Growing-stock volumes	Standard error of sampling	Sawtimber volumes	Standard error of sampling
Acres	*Percent*	*Thousand cu. ft.*	*Percent*	*Thousand bd. ft.*	*Percent*
1,128,000	4.8	1,000,000	2.9	1,044,780	9.4
1,000,000	5.1	500,000	4.1	1,000,000	9.6
500,000	7.2	380,760	4.7	500,000	13.6
300,000	9.3	300,000	5.3	300,000	17.5
100,000	16.1	100,000	9.2	100,000	30.3
50,000	22.7	50,000	13.1	50,000	42.9
30,000	29.3	30,000	16.9	30,000	55.4
10,000	50.8	10,000	29.2	10,000	96.0
5,000	71.9	5,000	41.3		
3,000	92.8	3,000	53.3		

The occurrence of a (—) in the statistical tables of this report indicates one of two things:

(1) No units were measured by the inventory.

(2) The quantity of data measured was insignificant and did not warrant reporting.

Definition of Terms

Land and Forest Area

Gross area. — The entire area of land and water as determined by the Bureau of the Census.

Land area. — The area of dry land and land temporarily or partially covered by water such as marshes, swamps, and flood plains; streams, and sloughs less than ⅛ mile wide; and lakes, reservoirs, and ponds less than 40 acres in area.

Forest land. — Land at least 10 percent stocked by forest trees of any size, or formerly having such tree cover and not currently developed for nonforest use. Does not include urban or thickly settled residential and resort areas, city parks, orchards, farmsteads, improved roads, or land developed and maintained for nonforest use by fencing, seeding, and so forth. The minimum area for classification of forest land or classes of forest land was 1 acre. Roadside, streamside, and shelterbelt strips of timber having a crown width of at least 120 feet qualified as forest land. Unimproved roads and trails, streams, and clearings in forest land were included as forest if less than 120 feet wide.

Commercial-forest land. — Forest land that is producing or capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation.

Noncommercial-forest land. — Unproductive forest land incapable of yielding crops of industrial wood because of adverse site conditions; and productive, public-forest land withdrawn from commercial timber use through statute or administrative regulation.

Ownership

National Forest. — Federal land that has been designated by Executive order or statute as National Forest, including purchase units; and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

Other public. — All publicly owned land other than National Forest.

Forest industry. — Land owned by companies or individuals operating wood-using plants.

Farmer and miscellaneous private. — All privately owned land except forest industry land.

Forest Types

Forest type. — A classification of forest land based upon species composition considering all live trees.

Southern pine. — Forests in which 50 percent or more of the stocking is shortleaf or other southern yellow pines, singly or in combination.

Redcedar-hardwoods. — Forests in which 50 percent or more of the stocking is hardwoods but in which redcedar makes up at least 25 percent of the stocking. Included also are those areas where redcedar makes up most of the stocking.

Oak-pine. — Forests in which 50 percent or more of the stocking is hardwoods (usually upland oaks) but in which southern pine makes up at least 25 percent of the stocking.

White oak. — Forests in which 50 percent or more of the stocking is white oak, except stands that classify as redcedar-hardwoods or oak-pine.

Oak-hickory. — Forests in which 50 percent or more of the stocking is upland oaks or hickories, singly or in combination, except stands that classify as oak-pine, redcedar-hardwoods, or white oak.

Central mixed hardwoods. — Forests in which 50 percent or more of the stocking is a combination of hardwood species, principally yellow-poplar, maple, beech, basswood, black walnut, elm, and northern red oak, except stands that classify as redcedar-hardwoods, oak-pine, oak-hickory, maple-beech, or elm-ash-cottonwood.

Maple-beech. — Forests in which 50 percent or more of the stocking is maple or beech, singly or in combination, except stands that classify as redcedar-hardwoods or oak-pine.

Elm-ash-cottonwood. — Forests in which 50 percent or more of the stocking is elm, ash, or cottonwood, singly or in combination except stands that classify as redcedar-hardwoods or oak-pine.

Stand-Size Classes

Stand-size class. — A classification of forest land based on the predominant size of timber present – sawtimber, poletimber, or seedlings and saplings.

Sawtimber stands. — Stands at least 10 percent stocked with growing-stock trees, with half or more of this stocking in sawtimber or poletimber trees and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands. — Stands at least 10 percent stocked with growing-stock trees, and with half or more of this stocking in sawtimber and/or poletimber trees and with poletimber stocking exceeding that of sawtimber.

Seedling-sapling stands. — Stands at least 10 percent stocked with growing-stock trees and with seedlings and/or saplings comprising more than half of this stocking.

Nonstocked areas. — Commercial-forest land less than 10 percent stocked with growing-stock trees.

Stocking Classes

Stocking class. — A classification of commercial-forest land based on the percent of area occupied by growing-stock trees. *Growing-stock trees* include all live trees except culls.

Well stocked. — Stands that are 70 percent or more stocked with growing-stock trees.

Medium stocked. — Stands that are 40 to 69 percent stocked with growing-stock trees.

Poorly stocked. — Stands that are from 10 to 39 percent stocked with growing-stock trees.

Nonstocked. — Areas of commercial-forest land not qualifying as sawtimber, poletimber, or seedling and sapling stands. These areas may contain some volume but less than 10 percent of the growing space is effectively utilized by growing stock.

Area-Condition Classes

A classification of commercial-forest land based upon stocking by desirable growing-stock trees and conditions affecting current and prospective timber growth. *Desirable growing-stock trees* are those that have no serious defects in quality limiting present or prospective use. They have relatively high vigor and contain no pathogens that may result in death or serious deterioration before rotation age. These are the trees that would be favored in silvicultural operations.

Desirable. — Areas 70 percent or more stocked with desirable trees.

Moderate and favorable. — Areas 40 to 70 percent stocked with desirable trees and with 30 percent or less of the area having other trees and/or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

Moderate and unfavorable. — Areas 40 to 70 percent stocked with desirable trees and with more than 30 percent of the area having other trees and/or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

Poor but favorable. — Areas less than 40 percent stocked with desirable trees and with 30 percent or less of the area having other trees and/or inhibiting vegetation or surface conditions that prevent occupancy by desirable trees.

Poor and unfavorable.— Areas less than 40 percent stocked with desirable trees and with more than 30 percent of the area having other trees and/or inhibiting vegetation or surface conditions that prevent occupancy by desirable species.

Volume Classification

Growing-stock volume. — Cubic-foot volume of sound wood in the bole of sawtimber and poletimber trees from the stump to a minimum 4-inch-top diameter outside bark or to the point where the central stem breaks into limbs.

Sawtimber volume. — Net volume of the saw-log portion of live sawtimber trees in board feet, International ¼-inch rule. The saw-log portion extends from stump to a minimum top diameter outside bark of 6 inches for softwoods and 8 inches for hardwoods or to the point where defects reduce saw-log quality below Standard Log Grade 3 or Tie-and-Timber Grade.

Tree-Size Classes

Sawtimber trees. — Live trees of commercial species containing at least an 8-foot saw log. Softwoods must be at least 9 inches and hardwoods at least 11 inches d.b.h. outside bark.

Poletimber trees. — Live trees of commercial species at least 5 inches d.b.h. but smaller than sawtimber size, and of good form and vigor.

Saplings. — Live trees of commercial species 1 to 5 inches d.b.h. and of good form and vigor.

Seedlings. — Live trees of commercial species less than 1 inch d.b.h. that are expected to survive.

Growth

Net annual growth. — The annual change in volume of sound wood in live sawtimber and poletimber trees and the total volume of trees entering these classes through ingrowth less volume losses resulting from natural causes.

Growing-stock growth. — Net annual growth of poletimber and sawtimber trees in cubic feet.

Sawtimber growth. — Net annual growth of sawtimber trees in board feet, International ¼-inch rule.

Timber Cut

Timber cut from growing stock. — The net cubic-foot volume of sound wood in live sawtimber and poletimber trees cut for forest products during a specified year, including both roundwood products and logging residues.

Timber cut from sawtimber. — The net board-foot volume of live sawtimber trees cut for forest products during a specified year, including both roundwood products and logging residues.

Desirable cut (formerly called allowable cut). — The net volume of live sawtimber and poletimber trees that can be cut annually during the next 10 years in commercial-logging operations while maintaining or increasing growing stock and while effecting a reasonably even distribution of age classes below the rotation age selected for each type. It includes harvest and improvement cuts yielding 3 cords or more per acre, and one-tenth of the entire net volume of stands 10 or more years beyond the rotation age. Desirable cut includes all timber of merchantable size that should be cut from commercial-forest land in order to salvage, rejuvenate, or improve the stands and increase the growth without regard to restraints of ownership, inaccessibility, or the profit motive. Some of this timber may not be available for sale, too hard to get at or too scattered, or of currently unwanted species or quality. More forest products may be obtained by reducing the "forest capital."

Rotation ages for saw-log trees in extensively managed stands by forest-type and site-index classes

(In years)

Forest type	Site index (50-year height in feet)*						
	40	50	60	70	80	90	100+
Southern pine	120	110	90	--	--	--	--
Redcedar-hardwoods	120	110	90	--	--	--	--
Oak-pine	120	110	90	--	--	--	--
White oak	120	110	90	80	75	70	--
Oak-hickory	120	110	90	80	75	70	--
Central mixed hardwoods	--	110	90	80	75	70	60
Maple-beech	--	100	100	100	100	--	--
Oak-gum-cypress	--	--	--	80	75	70	60
Elm-ash-cottonwood†	--	--	--	80	70	60	60

* Except in the case of cottonwood for which it is total height at 25 years.
† The rotation for cottonwood is half of the age shown.

Miscellaneous Definitions

Site class. — A classification of commercial-forest land based on potential yields in cubic feet per acre of mean annual growth at culmination of increment in fully stocked stands of desirable trees.

D.b.h. (Diameter at breast height). — Tree diameter in inches measured outside the bark at a point 4½ feet above the ground.

Diameter class. — Where data are presented in 2-inch diameter classes, they include diameters from 1.0 inches below to 0.9 inches above the stated midpoint; e.g., trees 5.0 inches to and including 6.9 inches, are included in the 6-inch class.

Principal Commercial Tree Species of Kentucky[2]

Softwood Species

Cypress (baldcypress) ..... *Taxodium distichum* (L.) Rich.
Hemlock (eastern) ..... *Tsuga canadensis* (L.) Carr.
Pine group includes —
  Shortleaf pine ..... *Pinus echinata* Mill.
  Other yellow pines:
    Pitch pine ..... *P. rigida* Mill.
    Virginia pine ..... *P. virginiana* Mill.
  White pine (eastern) ..... *P. strobus* L.
Redcedar (eastern) ..... *Juniperus virginiana* L.

Hardwood Species

Ash ..... *Fraxinus* L. species
Basswood ..... *Tilia* L. species
Beech (American) ..... *Fagus grandifolia* Ehrh.
Birch (yellow) ..... *Betula alleghaniensis* Britton
Blackgum ..... *Nyssa* L. species
Black walnut ..... *Juglans nigra* L.
Cottonwood (eastern) ..... *Populus deltoides* Bartr.
Hickory ..... *Carya* Nutt. species
Maple (hard) includes —
  Black maple ..... *Acer nigrum* Michx. f.
  Sugar maple ..... *A. saccharum* Marsh.
Maple (soft) includes —
  Boxelder ..... *A. negundo* L.
  Red maple ..... *A. rubrum* var. *rubrum* L.
  Silver maple ..... *A. saccharinum* L.
Oak group includes —
  Select red oaks:
    Cherrybark oak ..... *Quercus falcata* var. *pagodaefolia* Ell.
    Northern red oak ..... *Q. rubra* L.
    Shumard oak ..... *Q. shumardii* Buckl.
  Other red oaks:
    Black oak ..... *Q. velutina* Lam.
    Pin oak ..... *Q. palustris* Muenchh.
    Scarlet oak ..... *Q. coccinea* Muenchh.
    Shingle oak ..... *Q. imbricaria* Michx.
    Southern red oak ..... *Q. falcata* Michx.
    Water oak ..... *Q. nigra* L.
    Willow oak ..... *Q. phellos* L.

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[2] The common and scientific names are based on: Little, Elbert L., Jr. CHECK LIST OF NATIVE AND NATURALIZED TREES OF THE UNITED STATES (INCLUDING ALASKA). U.S. Dept. Agr. Handb. 41, 472 pp. 1953.

Select white oaks:
- Bur oak ..... *Q. macrocarpa* Michx.
- Chinkapin oak ..... *Q. muehlenbergii* Engelm.
- Swamp chestnut oak ..... *Q. michauxii* Nutt.
- Swamp white oak ..... *Q. bicolor* Willd.
- White oak ..... *Q. alba* L.

Other white oaks:
- Chestnut oak ..... *Q. prinus* L.
- Overcup oak ..... *Q. lyrata* Walt.
- Post oak ..... *Q. stellata* var. *stellata* Wangenh.
- Sweetgum ..... *Liquidambar styraciflua* L.
- Yellow-poplar ..... *Liriodendron tulipifera* L.

Other hardwoods includes —
- Birch (river) ..... *Betula nigra* L.
- Buckeye (Ohio) ..... *Aesculus glabra* Willd.
- Buckeye (yellow) ..... *A. octandra* Marsh.
- Butternut ..... *Juglans cinerea* L.
- Cherry (black) ..... *Prunus serotina* Ehrh.
- Coffeetree (Kentucky) ..... *Gymnocladus dioicus* (L.) K. Koch.
- Cucumbertree ..... *Magnolia acuminata* L.
- Dogwood (flowering) ..... *Cornus florida* L.
- Elm ..... *Ulmus* L. species
- Hackberry ..... *Celtis occidentalis* L.
- Honeylocust ..... *Gleditsia triacanthos* L.
- Locust (black) ..... *Robinia pseudoacacia* L.
- Mulberry (red) ..... *Morus rubra* L.
- Osage-orange ..... *Maclura pomifera* (Raf.) Schneid.
- Persimmon (common) ..... *Diospyros virginiana* L.
- Sassafras ..... *Sassafras albidum* (Nutt.) Nees
- Sycamore (American) ..... *Platanus occidentalis* L.
- Willow (black) ..... *Salix nigra* Marsh.

Statistical Tables

The following tables present forest-resource data for the Blue Grass Unit and each of its 36 counties. Tables 1-7 contain information on land and forest area; tables 8-12 information on numbers of trees and timber volume; and tables 13-18 information on growth, cut, and desirable cut. Data for individual counties are shown in tables 1, 4a and 4b, 10a-10c, 14, and 18.

Table 1. -- *Area of land and forest land by counties*
Blue Grass Unit, Kentucky, 1963

County	Gross area*	Land area*	Forest land			Commercial forest as a percent of land area
			All forest	Non-commercial	Commercial	
	Acres	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*
Anderson	131,800	131,800	34,100	100	34,000	25.8
Bath	183,700	183,700	56,500	200	56,300	30.6
Boone	166,400	161,300	44,400	100	44,300	27.5
Bourbon	192,000	192,000	5,100	--	5,100	2.7
Boyle	117,800	116,500	20,100	--	20,100	17.3
Bracken	134,400	131,800	39,600	300	39,300	29.8
Campbell	100,500	96,600	23,800	100	23,700	24.5
Carroll	88,300	83,800	26,600	500	26,100	31.1
Clark	165,800	165,800	12,200	200	12,000	7.2
Fayette	179,800	179,200	5,500	--	5,500	3.1
Fleming.	224,000	224,000	60,300	200	60,100	26.8
Franklin	135,000	135,000	44,700	400	44,300	32.8
Gallatin	67,200	64,000	19,600	100	19,500	30.5
Garrard	152,300	151,000	23,800	--	23,800	15.8
Grant	160,000	160,000	38,400	300	38,100	23.8
Harrison	197,100	197,100	33,500	100	33,400	16.9
Henry	185,000	185,000	44,800	600	44,200	23.9
Jefferson	247,700	240,000	33,500	100	33,400	13.9
Jessamine	113,300	113,300	12,200	100	12,100	10.7
Kenton	106,900	105,600	28,200	500	27,700	26.2
Lincoln	217,600	217,600	58,700	500	58,200	26.7
Madison	285,400	285,400	49,200	200	49,000	17.2
Mason	155,500	153,000	18,500	--	18,500	12.1
Mercer	165,800	163,800	17,600	100	17,500	10.7
Montgomery	130,600	130,600	18,700	200	18,500	14.2
Nicholas	130,600	130,600	23,900	100	23,800	18.2
Oldham	121,600	117,800	22,200	200	22,000	18.7
Owen	224,600	224,600	81,000	500	80,500	35.8
Pendleton	179,200	178,600	50,500	600	49,900	27.9
Robertson	64,600	64,600	16,300	100	16,200	25.1
Scott	181,800	181,800	25,600	200	25,400	14.0
Shelby	245,800	245,800	31,400	100	31,300	12.7
Spencer	123,500	123,500	24,600	100	24,500	19.8
Trimble	98,500	93,400	34,600	300	34,300	36.7
Washington	196,500	196,500	47,100	300	46,800	23.8
Woodford	123,500	123,500	8,700	100	8,600	7.0
Total	5,694,100	5,648,600	1,135,500	7,500	1,128,000	20.0

* Gross area and land area are from Bureau of Census, 1960.

Table 2. -- *Area of commercial-forest land by ownership and stand-size class*
Blue Grass Unit, Kentucky, 1963

(In acres)

Ownership class	All stands	Saw-timber	Pole-timber	Seedlings and saplings	Non-stocked
National forest	13,800	12,600	800	200	200
Other public	6,500	--	2,000	4,500	--
Forest industry	16,900	16,900	--	--	--
Farmer and miscellaneous private	1,090,800	217,800	381,700	476,400	14,900
All ownerships	1,128,000	247,300	384,500	481,100	15,100

Table 3. -- *Area of commercial-forest land by stocking and stand-size class*
Blue Grass Unit, Kentucky, 1963

(In acres)

Stocking class (percent)	All stands	Saw-timber	Pole-timber	Seedlings and saplings	Non-stocked
70 or more	258,800	70,300	109,300	79,200	--
40-70	608,700	141,000	235,300	232,400	--
10-40	245,400	36,000	39,900	169,500	--
Less than 10	15,100	--	--	--	15,100
All classes	1,128,000	247,300	384,500	481,100	15,100

Table 4. -- *Area of commercial-forest land by forest type and stand-size class*
Blue Grass Unit, Kentucky, 1963

(In acres)

Forest-type	All stands	Saw-timber	Pole-timber	Seedlings and saplings	Non-stocked
Southern pine	30,100	7,800	--	14,400	7,900
Redcedar-hardwoods	223,700	23,800	62,700	137,200	--
Oak-pine	22,700	7,600	9,100	6,000	--
White oak	12,300	4,700	4,100	3,500	--
Oak-hickory	283,000	89,700	116,300	76,800	200
Central mixed hardwoods	361,400	60,600	119,400	181,400	--
Maple-beech	16,000	12,500	--	3,500	--
Elm-ash-cottonwood	178,800	40,600	72,900	58,300	7,000
All types	1,128,000	247,300	384,500	481,100	15,100

Table 4a.--*Area of commercial-forest land by county and forest type*
Blue Grass Unit, Kentucky, 1963

(In acres)

County	All types	Southern pine	Redcedar-hardwoods	Oak-pine	White oak	Oak-hickory	Central mixed hardwoods	Maple-beech	Elm-ash-cottonwood
Anderson	34,000	200	6,900	500	400	7,000	12,600	500	5,900
Bath	56,300	3,400	10,600	3,500	1,400	12,200	18,200	400	6,600
Boone	44,300	400	8,300	400	400	10,700	16,300	1,100	6,700
Bourbon	5,100	200	1,500	100	100	1,300	1,500	100	300
Boyle	20,100	400	3,200	600	200	6,200	5,600	200	3,700
Bracken	39,300	700	7,800	500	600	7,800	15,000	700	6,200
Campbell	23,700	400	4,100	200	100	5,500	8,700	400	4,300
Carroll	26,100	1,000	4,000	500	300	6,600	9,000	400	4,300
Clark	12,000	300	2,200	300	100	2,200	4,000	100	2,800
Fayette	5,500	200	1,200	100	--	1,100	1,900	100	900
Fleming	60,100	600	6,700	2,200	400	27,200	14,200	500	8,300
Franklin	44,300	900	9,600	900	400	11,800	12,900	1,000	6,800
Gallatin	19,500	200	3,900	300	400	3,900	7,000	200	3,600
Garrard	23,800	800	4,400	100	200	7,500	6,300	500	4,000
Grant	38,100	800	7,400	300	400	7,200	15,000	700	6,300
Harrison	33,400	1,000	5,700	100	500	7,600	11,300	600	6,600
Henry	44,200	1,200	10,800	1,100	500	10,800	13,400	900	5,500
Jefferson	33,400	800	7,000	300	400	8,000	9,900	500	6,500
Jessamine	12,100	300	2,200	100	200	2,600	4,800	200	1,700
Kenton	27,700	200	5,500	800	400	5,800	9,700	600	4,700
Lincoln	58,200	1,100	7,700	2,500	300	26,500	10,900	600	8,600
Madison	49,000	4,500	9,500	800	300	11,300	13,300	400	8,900
Mason	18,500	300	3,600	300	300	4,000	6,800	300	2,900
Mercer	17,500	500	3,500	500	--	4,200	5,900	--	2,900
Montgomery	18,500	700	4,200	500	200	4,500	5,900	300	2,200
Nicholas	23,800	600	3,700	300	200	4,800	10,200	500	3,500
Oldham	22,000	2,300	4,400	200	300	4,600	5,400	300	4,500
Owen	80,500	600	18,000	1,500	1,100	20,100	25,900	1,400	11,900
Pendleton	49,900	700	13,300	700	500	9,600	15,800	200	9,100
Robertson	16,200	--	3,300	500	100	3,500	7,300	100	1,400
Scott	25,400	400	4,200	300	300	5,800	8,900	400	5,100
Shelby	31,300	600	9,800	300	500	6,000	10,200	300	3,600
Spencer	24,500	700	6,900	200	100	4,500	6,700	200	5,200
Trimble	34,300	1,600	7,900	400	400	6,400	10,800	400	6,400
Washington	46,800	800	8,500	600	300	12,800	17,000	900	5,900
Woodford	8,600	700	2,200	200	--	1,400	3,100	--	1,000
Total	1,128,000	30,100	223,700	22,700	12,300	283,000	361,400	16,000	178,800

Table 4b. -- *Area of commercial-forest land by county and stand-size class*
Blue Grass Unit, Kentucky, 1963

(In acres)

County	All stands	Saw-timber	Pole-timber	Seedlings and saplings	Non-stocked
Anderson	34,000	6,700	14,800	12,300	200
Bath	56,300	22,200	12,000	21,000	1,100
Boone	44,300	9,300	16,700	18,000	300
Bourbon	5,100	600	1,500	2,800	200
Boyle	20,100	4,600	8,300	7,000	200
Bracken	39,300	8,100	11,600	18,800	800
Campbell	23,700	4,400	10,100	8,800	400
Carroll	26,100	4,700	9,300	11,600	500
Clark	12,000	2,900	3,400	5,400	300
Fayette	5,500	600	1,800	2,900	200
Fleming	60,100	19,200	22,100	18,200	600
Franklin	44,300	8,200	17,200	18,600	300
Gallatin	19,500	4,000	5,800	9,500	200
Garrard	23,800	5,100	9,400	9,100	200
Grant	38,100	6,400	11,000	19,600	1,100
Harrison	33,400	7,000	11,500	14,200	700
Henry	44,200	7,500	15,200	21,100	400
Jefferson	33,400	7,300	12,300	13,300	500
Jessamine	12,100	2,400	4,600	4,900	200
Kenton	27,700	6,400	10,200	11,000	100
Lincoln	58,200	20,400	21,100	16,300	400
Madison	49,000	11,000	15,700	21,600	700
Mason	18,500	2,800	5,700	9,700	300
Mercer	17,500	2,600	5,600	8,800	500
Montgomery	18,500	3,500	8,200	6,500	300
Nicholas	23,800	4,100	7,600	11,800	300
Oldham	22,000	5,900	5,800	10,100	200
Owen	80,500	16,400	31,000	32,800	300
Pendleton	49,900	8,900	12,300	27,800	900
Robertson	16,200	2,100	4,500	9,400	200
Scott	25,400	5,000	7,400	12,300	700
Shelby	31,300	5,800	10,900	14,100	500
Spencer	24,500	4,800	10,000	9,400	300
Trimble	34,300	5,700	10,100	17,900	600
Washington	46,800	9,500	17,000	20,100	200
Woodford	8,600	1,200	2,800	4,400	200
Total	1,128,000	247,300	384,500	481,100	15,100

Table 5. -- *Area of commercial-forest land by forest type and site class*
Blue Grass Unit, Kentucky, 1963

(In acres)

Forest type	All sites	Site class (potential growth per acre per year) in cubic feet			
		120 or more	85 to 120	50 to 85	Less than 50
Southern pine	30,100	--	20,100	10,000	--
Redcedar-hardwoods	223,700	--	180,000	43,700	--
Oak-pine	22,700	500	700	21,500	--
White oak	12,300	200	4,100	8,000	--
Oak-hickory	283,000	1,000	175,600	100,400	6,000
Central mixed hardwoods	361,400	4,800	253,300	88,700	14,600
Maple-beech	16,000	--	3,900	12,100	--
Elm-ash-cottonwood	178,800	--	108,300	65,900	4,600
All types	1,128,000	6,500	746,000	350,300	25,200

Table 6.--*Area of commercial-forest land by forest type and stand-age class*
Blue Grass Unit, Kentucky, 1963

(In acres by age in years)

Forest type	All ages	Less than 9	10-19	20-29	30-39	40-49	50-59	60-79	80-99	100 or more
Southern pine	30,100	8,200	9,100	5,100	3,800	--	3,900	--	--	--
Redcedar-Hardwoods	223,700	22,300	30,300	56,300	55,800	39,300	19,700	--	--	--
Oak-pine	22,700	--	4,800	--	10,000	6,800	--	900	200	--
White oak	12,300	--	--	3,500	4,200	--	4,200	300	100	--
Oak-hickory	283,000	6,100	13,700	47,600	64,100	81,600	32,800	19,000	18,000	100
Central mixed hardwoods	361,400	26,000	47,000	118,700	104,500	28,800	23,300	5,300	7,700	100
Maple-beech	16,000	--	--	3,300	--	--	--	--	8,800	3,900
Elm-ash-cottonwood	178,800	3,900	14,500	32,000	47,100	46,400	15,300	14,400	5,200	--
All types	1,128,000	66,500	119,400	266,500	289,500	202,900	99,200	39,900	40,000	4,100

Table 7.--*Area of commercial-forest land by forest type and area-condition class*
Blue Grass Unit, Kentucky, 1963

(In acres)

Forest type	All area conditions	Desirable	Moderate and favorable	Moderate and unfavorable	Poor but favorable	Poor and unfavorable
Southern pine	30,100	--	9,100	3,900	3,600	13,500
Redcedar hardwoods	223,700	--	45,500	12,600	56,700	108,900
Oak-pine	22,700	200	--	7,000	--	15,500
White oak	12,300	100	--	4,400	--	7,800
Oak-hickory	283,000	400	22,900	30,500	30,900	198,300
Central mixed hardwoods	361,400	300	4,100	12,600	42,800	301,600
Maple-beech	16,000	--	--	--	--	16,000
Elm-ash-cottonwood	178,800	--	--	8,600	31,300	138,900
All types	1,128,000	1,000	81,600	79,600	165,300	800,500

Table 8.--*Number of growing-stock trees on commercial-forest land by diameter class and species group*
Blue Grass Unit, Kentucky, 1963

(In thousand trees)

D.b.h. class (inches)	All species	Softwoods	Hardwoods
2	182,400	35,730	146,670
4	118,950	20,020	98,930
6	39,050	3,980	35,070
8	18,660	2,190	16,470
10	9,010	760	8,250
12	5,010	380	4,630
14	2,540	220	2,320
16	1,280	140	1,140
18	540	10	530
20	260	10	250
22	130	--	130
24 +	160	--	160
All diameter classes	377,990	63,440	314,550

Table 9.--*Volume of growing stock and sawtimber on commercial-forest land by ownership and species group*
Blue Grass Unit, Kentucky, 1963

Ownership class	Growing stock			Sawtimber		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd. ft.**	*Thousand bd. ft.**
National forest	16,810	2,000	14,810	51,550	6,280	45,270
Other public	2,430	960	1,470	5,760	2,730	3,030
Forest industry	15,590	200	15,390	80,000	1,010	78,990
Farmer and miscellaneous private	345,930	29,490	316,440	907,470	70,120	837,350
All ownerships	380,760	32,650	348,110	1,044,780	80,140	964,640

*International 1/4-inch rule.

Table 10.--*Volume of growing stock and sawtimber on commercial-forest land by species and kind of material*
Blue Grass Unit, Kentucky, 1963

Species	Growing stock			Sawtimber		
	Total	Poletimber trees	Sawtimber trees	Total	In sawtimber stands	In other stands
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd. ft.**	*Thousand bd. ft.**
Softwoods:						
Shortleaf pine	3,030	830	2,200	10,310	8,180	2,130
Other yellow pines	10,570	4,770	5,800	30,240	29,170	1,070
Redcedar	19,050	9,700	9,350	39,590	26,910	12,680
Total softwoods	32,650	15,300	17,350	80,140	64,260	15,880
Hardwoods:						
Select white oak	57,310	29,700	27,610	154,040	99,630	54,410
Select red oak	13,300	3,910	9,390	55,670	46,200	9,470
Other white oak	20,720	10,360	10,360	57,480	36,670	20,810
Other red oak	46,470	21,550	24,920	140,830	85,450	55,380
Hickories	53,800	27,520	26,280	150,340	123,600	26,740
Hard maple	16,700	9,950	6,750	38,010	26,450	11,560
Beech	5,160	520	4,640	27,390	23,780	3,610
Black walnut	10,990	5,580	5,410	30,100	18,200	11,900
Ash	27,980	15,400	12,580	66,230	44,920	21,310
Soft maple	11,130	5,490	5,640	29,240	23,610	5,630
Sweetgum	1,930	500	1,430	8,090	6,570	1,520
Blackgum	2,640	940	1,700	9,580	8,150	1,430
Cottonwood	580	--	580	3,710	3,710	--
Yellow-poplar	13,850	3,890	9,960	59,360	48,520	10,840
Basswood	1,400	240	1,160	4,710	4,710	--
Other	64,150	40,450	23,700	129,860	80,120	49,740
Total hardwoods	348,110	176,000	172,110	964,640	680,290	284,350
All species	380,760	191,300	189,460	1,044,780	744,550	300,230

*International 1/4-inch rule.

Table 10a.--*Volume of growing stock on commercial-forest land by county and species, Blue Grass Unit, Kentucky, 1963*

(In thousand cubic feet)

Species	All counties	Anderson	Bath	Boone	Bourbon	Boyle	Bracken	Campbell	Carroll	Clark	Fayette	Fleming	Franklin
Softwoods:													
Shortleaf pine	3,030	80	1,170	90	--	30	130	80	70	60	--	100	60
Other yellow pines	10,570	120	2,330	50	--	130	70	40	110	40	--	510	110
Redcedar	19,050	650	1,100	640	80	250	440	380	310	160	40	450	990
Total softwoods	32,650	850	4,600	780	80	410	640	500	490	260	40	1,060	1,160
Hardwoods:													
Select white oak	57,310	1,420	4,740	2,180	190	1,320	1,650	980	1,340	570	150	5,200	2,140
Select red oak	13, 300	320	1,410	470	20	210	480	370	230	180	20	1,260	380
Other white oak	20,720	410	1,270	660	50	540	580	400	420	70	20	2,900	660
Other red oak	46,470	1,330	2,770	1,880	170	960	1,450	990	940	370	150	3,940	1,620
Hickories	53,800	1,570	3,700	2,050	170	1,370	1,600	1,070	1,280	340	130	5,920	1,740
Hard maple	16,700	400	640	860	30	310	600	340	390	200	80	830	960
Beech	5,160	220	720	310	--	110	140	160	110	30	60	170	270
Black walnut	10,990	360	440	470	60	240	450	240	300	120	50	560	370
Ash	27,980	960	1,200	1,280	50	710	1,000	560	690	320	100	1,470	1,180
Soft maple	11,130	310	790	390	10	360	300	220	260	100	30	1,200	330
Sweetgum	1,930	80	110	60	--	40	60	50	40	10	20	120	80
Blackgum	2,640	50	440	30	--	40	40	60	20	20	10	280	70
Cottonwood	580	10	--	--	--	20	10	--	10	--	--	120	--
Yellow-poplar	13,850	150	3,390	260	10	210	230	230	160	60	30	1,000	510
Basswood	1,400	10	1,110	20	--	20	20	--	10	--	--	10	20
Other	64,150	2,300	2,300	2,970	230	1,160	2,420	1,690	1,570	780	370	2,780	2,740
Total hardwoods	348,110	9,900	25,030	13,890	990	7,620	11,030	7,360	7,770	3,170	1,220	27,760	13,070
All species	380,760	10,750	29,630	14,670	1,070	8,030	11,670	7,860	8,260	3,430	1,260	28,820	14,230

Table 10a.--*Volume of growing stock on commercial-forest land by county and species, Blue Grass Unit, Kentucky, 1963 (Contd.)*

(In thousand cubic feet)

Species	Gallatin	Garrard	Grant	Harrison	Henry	Jefferson	Jessamine	Kenton	Lincoln	Madison	Mason	Mercer
Softwoods:												
Shortleaf pine	30	40	80	50	30	50	40	80	50	40	20	20
Other yellow pines	80	520	90	40	110	430	40	160	890	2,150	70	100
Redcedar	460	520	370	430	1,050	890	150	420	640	820	120	240
Total softwoods	570	1,080	540	520	1,190	1,370	230	660	1,580	3,010	210	360
Hardwoods:												
Select white oak	870	1,410	1,360	1,400	2,130	1,720	580	1,310	5,420	2,300	690	570
Select red oak	140	350	340	360	500	430	130	300	1,210	490	110	80
Other white oak	230	560	320	550	650	790	230	290	2,610	820	180	190
Other red oak	650	1,060	1,200	1,400	1,630	1,360	400	1,040	3,840	1,920	510	680
Hickories	680	1,530	1,210	1,500	1,650	1,710	420	990	5,860	1,810	480	560
Hard maple	300	230	350	480	740	530	350	610	970	670	350	140
Beech	20	180	240	270	180	140	--	150	210	140	30	20
Black walnut	220	270	380	320	430	370	110	270	640	420	190	130
Ash	530	570	860	880	1,010	830	340	920	1,790	1,000	460	300
Soft maple	160	240	270	270	280	380	130	180	1,160	520	150	90
Sweetgum	20	70	90	60	60	80	10	70	170	60	20	20
Blackgum	20	40	60	80	70	100	40	40	280	110	30	20
Cottonwood	--	--	--	20	20	--	--	--	160	20	--	20
Yellow-poplar	80	230	230	150	320	340	300	210	1,060	540	30	70
Basswood	10	--	--	10	20	10	10	10	10	10	10	--
Other	1,090	1,330	2,150	2,310	2,560	2,010	890	1,880	2,780	2,320	1,060	780
Total hardwoods	5,020	8,070	9,060	10,060	12,250	10,800	3,940	8,270	28,170	13,150	4,300	3,670
All species	5,590	9,150	9,600	10,580	13,440	12,170	4,170	8,930	29,750	16,160	4,510	4,030

Table 10a.--*Volume of growing stock on commercial-forest land by county and species, Blue Grass Unit, Kentucky, 1963 (Contd.)*

(In thousand cubic feet)

Species	Montgomery	Nicholas	Oldham	Owen	Pendleton	Robertson	Scott	Shelby	Spencer	Trimble	Washington	Woodford
Softwoods:												
Shortleaf pine	40	40	20	130	50	20	40	50	40	70	110	20
Other yellow pines	110	100	680	230	150	50	60	80	480	280	120	40
Redcedar	440	270	580	2,050	600	140	250	1,030	1,080	340	570	100
Total softwoods	590	410	1,280	2,410	800	210	350	1,160	1,600	690	800	160
Hardwoods:												
Select white oak	980	950	880	3,810	1,690	560	1,130	1,170	830	1,230	2,190	250
Select red oak	250	190	170	890	350	70	240	300	220	260	520	50
Other white oak	360	280	340	1,160	680	110	270	360	340	410	910	100
Other red oak	730	800	760	3,180	1,780	520	870	1,130	1,110	990	2,030	310
Hickories	1,110	740	570	3,770	1,490	390	1,010	960	1,160	1,000	2,020	240
Hard maple	280	320	340	1,400	510	180	340	370	190	600	730	80
Beech	70	130	90	360	60	30	140	50	110	60	180	--
Black walnut	180	200	190	790	510	90	250	290	210	370	430	70
Ash	420	570	570	2,130	1,070	260	710	610	550	820	1,110	150
Soft maple	190	210	250	540	440	70	230	250	160	330	270	60
Sweetgum	30	40	30	150	40	10	50	20	60	30	60	10
Blackgum	50	20	100	100	100	20	40	80	30	80	60	10
Cottonwood	20	--	20	10	50	20	10	--	--	10	20	10
Yellow-poplar	180	90	780	460	580	50	180	640	80	610	350	50
Basswood	--	--	20	20	10	--	10	--	--	20	--	--
Other	1,040	1,450	1,220	5,000	2,400	760	1,520	1,760	1,440	2,030	2,630	430
Total hardwoods	5,890	5,990	6,330	23,770	11,760	3,140	7,000	7,990	6,490	8,850	13,510	1,820
All species	6,480	6,400	7,610	26,180	12,560	3,350	7,350	9,150	8,090	9,540	14,310	1,980

Table 10b. -- *Volume of sawtimber on commercial-forest land by county and species, Blue Grass Unit, Kentucky, 1963*

(In thousand board feet)*

Species	All counties	Anderson	Bath	Boone	Bourbon	Boyle	Bracken	Campbell	Carroll	Clark	Fayette	Fleming	Franklin
Softwoods:													
Shortleaf pine	10,310	340	3,780	380	--	70	450	280	210	240	--	380	180
Other yellow pines	30,240	300	7,140	150	10	60	170	90	60	90	--	410	120
Redcedar	39,590	910	3,070	910	20	280	590	580	420	310	70	590	2,180
Total softwoods	80,140	1,550	13,990	1,440	30	410	1,210	950	690	640	70	1,380	2,480
Hardwoods:													
Select white oak	154,040	3,150	12,750	5,340	280	4,370	4,140	2,410	3,320	1,700	170	17,500	4,800
Select red oak	55,670	1,330	5,710	1,550	110	970	1,840	1,360	950	840	90	6,310	1,670
Other white oak	57,480	790	3,180	1,440	100	1,500	1,670	930	1,110	130	--	9,480	1,870
Other red oak	140,830	4,020	7,820	5,350	440	3,380	4,430	2,650	2,820	1,010	440	14,530	4,640
Hickories	150,340	3,390	9,990	5,460	400	4,000	4,890	2,510	3,330	930	160	21,360	3,680
Hard maple	38,010	710	1,070	2,190	100	560	1,550	810	890	580	140	1,950	2,140
Beech	27,390	1,140	2,890	1,780	--	640	830	870	650	60	290	970	1,570
Black walnut	30,100	1,100	1,080	1,230	150	710	1,440	700	930	440	140	1,640	960
Ash	66,230	2,320	3,210	3,130	140	2,000	2,260	1,170	1,720	780	140	3,590	2,800
Soft maple	29,240	820	2,760	940	10	760	750	610	550	320	30	3,160	840
Sweetgum	8,090	420	210	400	--	180	290	270	170	30	110	420	400
Blackgum	9,580	70	1,990	80	--	140	160	170	80	70	20	930	320
Cottonwood	3,710	50	--	--	--	160	50	--	50	--	--	740	--
Yellow-poplar	59,360	770	15,100	1,060	20	590	970	780	530	430	110	2,430	2,510
Basswood	4,710	20	3,970	40	--	40	40	--	20	--	--	20	40
Other	129,860	4,640	5,000	6,610	450	2,210	4,860	3,390	3,150	1,580	640	5,190	6,250
Total hardwoods	964,640	24,740	76,730	36,600	2,200	22,210	30,170	18,630	20,270	8,900	2,480	90,220	34,490
All species	1,044,780	26,290	90,720	38,040	2,230	22,620	31,380	19,580	20,960	9,540	2,550	91,600	36,970

* International ¼-inch rule. .

Table 10b. -- *Volume of sawtimber on commercial-forest land by county and species, Blue Grass Unit, Kentucky, 1963 (Contd.)*

(In thousand board feet)*

Species	Gallatin	Garrard	Grant	Harrison	Henry	Jefferson	Jessamine	Kenton	Lincoln	Madison	Mason	Mercer
Softwoods:												
Shortleaf pine	40	140	280	210	80	140	140	340	170	140	40	30
Other yellow pines	120	1,780	220	70	130	1,010	90	300	1,860	8,750	190	120
Redcedar	1,380	870	490	630	3,010	2,550	90	750	950	1,420	80	210
Total softwoods	1,540	2,790	990	910	3,220	3,700	320	1,390	2,980	10,310	310	360
Hardwoods:												
Select white oak	2,260	3,170	3,190	3,680	4,490	4,980	1,520	3,490	19,290	7,210	1,450	1,640
Select red oak	750	1,190	1,370	1,360	1,500	1,850	570	1,000	5,800	2,450	540	350
Other white oak	620	1,610	660	1,620	1,830	2,150	680	610	8,930	2,690	390	530
Other red oak	2,060	2,980	3,570	4,480	4,230	4,000	1,070	2,830	14,180	5,270	1,460	2,130
Hickories	1,910	4,260	2,990	4,600	3,820	5,050	990	2,230	20,680	5,040	1,220	1,260
Hard maple	770	350	700	940	1,860	1,330	1,050	1,560	2,330	1,060	1,030	170
Beech	90	1,030	1,370	1,330	960	710	10	850	1,270	720	70	120
Black walnut	660	720	1,080	980	1,140	1,040	290	720	1,840	1,240	470	330
Ash	1,220	1,340	1,750	1,800	2,320	1,800	860	2,080	5,120	2,530	1,000	640
Soft maple	360	620	690	610	560	950	430	290	2,970	1,430	340	190
Sweetgum	50	280	430	340	280	300	40	330	620	220	60	50
Blackgum	70	140	140	90	260	290	200	160	930	370	30	50
Cottonwood	--	--	--	110	160	--	--	--	1,110	160	--	110
Yellow-poplar	340	780	870	740	1,210	1,010	1,690	990	2,800	2,770	120	230
Basswood	20	--	--	20	40	20	20	50	70	20	20	--
Other	2,320	2,810	4,310	4,310	4,790	4,010	1,980	3,990	5,220	4,820	2,150	1,500
Total hardwoods	13,500	21,280	23,120	27,010	29,450	29,490	11,400	21,180	93,160	38,000	10,350	9,300
All species	15,040	24,070	24,110	27,920	32,670	33,190	11,720	22,570	96,140	48,310	10,660	9,660

* International ¼-inch rule.

Table 10b.--*Volume of sawtimber on commercial-forest land by county and species, Blue Grass Unit, Kentucky, 1963 (Contd.)*

(In thousand board feet)*

Species	Montgomery	Nicholas	Oldham	Owen	Pendleton	Robertson	Scott	Shelby	Spencer	Trimble	Washington	Woodford
Softwoods:												
Shortleaf pine	140	140	40	420	140	100	140	200	140	210	480	100
Other yellow pines	60	280	2,840	430	370	100	150	200	1,270	950	250	100
Redcedar	700	330	1,870	5,590	1,290	150	450	2,880	2,800	360	700	110
Total softwoods	900	750	4,750	6,440	1,800	350	740	3,280	4,210	1,520	1,430	310
Hardwoods:												
Select white oak	2,850	2,040	2,350	8,800	4,360	1,270	2,970	2,190	1,720	3,000	5,500	690
Select red oak	1,040	680	900	3,080	1,750	220	950	1,510	610	1,270	2,050	150
Other white oak	1,140	590	1,020	3,000	1,770	210	700	620	640	950	2,110	210
Other red oak	2,210	2,030	2,290	8,890	5,720	1,650	2,650	2,820	2,870	2,600	6,450	860
Hickories	2,780	1,670	1,450	9,380	4,530	940	3,010	1,820	2,460	2,170	5,360	620
Hard maple	680	820	580	3,360	1,030	480	770	640	250	1,590	1,830	140
Beech	410	790	500	2,010	330	100	810	260	590	310	1,050	10
Black walnut	560	630	470	2,140	1,040	170	700	670	410	950	1,160	170
Ash	920	1,120	1,600	4,970	2,750	410	1,670	1,340	1,000	2,060	2,410	260
Soft maple	420	570	1,010	1,190	1,340	140	560	900	340	980	680	120
Sweetgum	150	190	150	740	120	20	200	50	160	60	310	40
Blackgum	170	50	490	330	410	50	130	450	50	430	230	30
Cottonwood	110	--	160	50	320	110	50	--	--	50	110	50
Yellow-poplar	620	420	4,620	1,680	2,940	170	600	4,040	420	3,480	1,320	200
Basswood	--	--	40	90	40	--	20	--	--	50	--	--
Other	1,850	3,340	2,750	9,600	4,660	1,130	2,880	3,820	3,120	4,110	5,620	800
Total hardwoods	15,910	14,940	20,380	59,310	33,110	7,070	18,670	21,130	14,640	24,060	36,190	4,350
All species	16,810	15,690	25,130	65,750	34,910	7,420	19,410	24,410	18,850	25,580	37,620	4,660

* International 1/4-inch rule.

Table 10c.--*Volume of growing stock and sawtimber on commercial-forest land by county and kind of material*
Blue Grass Unit, Kentucky, 1963

County	Growing stock			Sawtimber		
	Total	Poletimber trees	Sawtimber trees	Total	In sawtimber stands	In other stands
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd. ft.**	*Thousand bd. ft.**
Anderson	10,750	6,010	4,740	26,290	16,690	9,600
Bath	29,630	9,180	20,450	90,720	81,900	8,820
Boone	14,670	7,840	6,830	38,040	25,730	12,310
Bourbon	1,070	660	410	2,230	1,080	1,150
Boyle	8,030	4,020	4,010	22,620	16,420	6,200
Bracken	11,670	6,100	5,570	31,380	21,850	9,530
Campbell	7,860	4,370	3,490	19,580	12,180	7,400
Carroll	8,260	4,550	3,710	20,960	13,340	7,620
Clark	3,430	1,780	1,650	9,540	7,050	2,490
Fayette	1,260	800	460	2,550	1,380	1,170
Fleming	28,820	12,900	15,920	91,600	71,300	20,300
Franklin	14,230	7,660	6,570	36,970	23,560	13,410
Gallatin	5,590	2,910	2,680	15,040	10,260	4,780
Garrard	9,150	4,830	4,320	24,070	15,970	8,100
Grant	9,600	5,300	4,300	24,110	15,670	8,440
Harrison	10,580	5,610	4,970	27,920	19,420	8,500
Henry	13,440	7,500	5,940	32,670	20,110	12,560
Jefferson	12,170	6,270	5,900	33,190	22,810	10,380
Jessamine	4,170	2,130	2,040	11,720	7,700	4,020
Kenton	8,930	4,870	4,060	22,570	15,410	7,160
Lincoln	29,750	13,060	16,690	96,140	76,630	19,510
Madison	16,160	7,760	8,400	48,310	35,410	12,900
Mason	4,510	2,590	1,920	10,660	5,980	4,680
Mercer	4,030	2,310	1,720	9,660	5,710	3,950
Montgomery	6,480	3,500	2,980	16,810	10,850	5,960
Nicholas	6,400	3,570	2,830	15,690	9,760	5,930
Oldham	7,610	3,260	4,350	25,130	20,480	4,650
Owen	26,180	14,350	11,830	65,750	43,100	22,650
Pendleton	12,560	6,420	6,140	34,910	25,890	9,020
Robertson	3,350	2,000	1,350	7,420	4,450	2,970
Scott	7,350	3,880	3,470	19,410	13,680	5,730
Shelby	9,150	4,860	4,290	24,410	16,520	7,890
Spencer	8,090	4,590	3,500	18,850	11,630	7,220
Trimble	9,540	5,080	4,460	25,580	17,770	7,810
Washington	14,310	7,640	6,670	37,620	24,230	13,390
Woodford	1,980	1,140	840	4,660	2,630	2,030
Total	380,760	191,300	189,460	1,044,780	744,550	300,230

*International 1/4-inch rule.

Table 11--*Volume of growing stock on commercial-forest land by species and diameter class*
Blue Grass Unit, Kentucky, 1963

(In thousand cubic feet by diameter in inches)

Species	Total	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0 and larger
Softwoods:											
Shortleaf pine	3,030	20	810	790	250	250	220	480	150	60	--
Other yellow pines	10,570	1,740	3,030	2,340	2,150	790	520	--	--	--	--
Redcedar	19,050	4,820	4,880	2,330	2,320	2,360	2,340	--	--	--	--
Total softwoods	32,650	6,580	8,720	5,460	4,720	3,400	3,080	480	150	60	--
Hardwoods:											
Select white oak	57,310	7,100	8,850	13,750	12,300	6,920	3,970	1,730	800	1,310	580
Select red oak	13,300	1,010	1,590	1,310	1,050	2,380	2,410	1,140	160	910	1,340
Other white oak	20,720	2,460	3,440	4,460	2,540	2,930	3,250	1,640	--	--	--
Other red oak	46,470	7,600	6,980	6,970	9,760	5,680	3,270	2,270	1,470	160	2,310
Hickories	53,800	8,730	10,360	8,430	10,280	7,820	3,600	2,620	760	350	850
Hard maple	16,700	1,870	4,310	3,770	1,590	2,370	700	910	300	320	560
Beech	5,160	210	--	310	120	240	520	330	1,140	1,160	1,130
Black walnut	10,990	1,290	2,160	2,130	1,640	1,630	1,630	510	--	--	--
Ash	27,980	3,380	6,880	5,140	4,200	3,810	2,080	1,070	--	--	1,420
Soft maple	11,130	1,130	1,310	3,050	1,880	2,080	700	430	170	380	--
Sweetgum	1,930	140	120	240	540	--	400	490	--	--	--
Blackgum	2,640	450	320	170	1,040	80	120	90	370	--	--
Cottonwood	580	--	--	--	--	--	--	--	580	--	--
Yellow-poplar	13,850	560	2,780	550	2,670	2,150	2,080	780	1,560	100	620
Basswood	1,400	--	160	80	--	170	410	140	110	--	330
Other	64,150	13,100	15,660	11,690	8,920	3,800	2,800	2,920	2,670	1,960	630
Total hardwoods	348,110	49,030	64,920	62,050	58,530	42,060	27,940	17,070	10,090	6,650	9,770
All species	380,760	55,610	73,640	67,510	63,250	45,460	31,020	17,550	10,240	6,710	9,770

Table 12.--*Volume of sawtimber on commercial-forest land by species and diameter class*

Blue Grass Unit, Kentucky, 1963

(In thousand board feet* by diameter in inches)

Species	Total	9.0-10.9†	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-22.9	23.0 and larger
Softwoods:									
Shortleaf pine	10,310	4,090	880	880	770	2,480	1,000	210	--
Other yellow pines	30,240	11,370	11,180	4,480	3,210	--	--	--	--
Redcedar	39,590	7,800	9,400	9,660	12,730	--	--	--	--
Total softwoods	80,140	23,260	21,460	15,020	16,710	2,480	1,000	210	--
Hardwoods:									
Select white oak	154,040	--	66,750	38,080	22,010	11,130	4,600	8,170	3,300
Select red oak	55,670	--	5,930	14,150	14,430	6,790	650	5,140	8,580
Other white oak	57,480	--	13,850	15,940	17,970	9,720	--	--	--
Other red oak	140,830	--	52,440	32,130	19,060	13,310	8,930	1,070	13,890
Hickories	150,340	--	56,070	44,440	18,960	17,550	4,730	2,140	6,450
Hard maple	38,010	--	7,550	13,230	4,340	5,300	1,790	1,910	3,890
Beech	27,390	--	390	1,370	2,830	1,990	6,320	7,300	7,190
Black walnut	30,100	--	9,070	9,120	8,750	3,160	--	--	--
Ash	66,230	--	20,530	19,360	11,650	5,740	--	--	8,950
Soft maple	29,240	--	9,090	10,640	4,100	2,460	670	2,280	--
Sweetgum	8,090	--	2,720	--	1,940	3,430	--	--	--
Blackgum	9,580	--	6,060	310	470	340	2,400	--	--
Cottonwood	3,710	--	--	--	--	--	3,710	--	--
Yellow-poplar	59,360	--	13,480	12,380	12,640	4,780	9,770	420	5,890
Basswood	4,710	--	--	700	1,520	600	420	--	1,470
Other	129,860	--	42,790	21,200	15,260	17,170	16,550	12,760	4,130
Total hardwoods	964,640	--	306,720	233,050	155,930	103,470	60,540	41,190	63,740
All species	1,044,780	23,260	328,180	248,070	172,640	105,950	61,540	41,400	63,740

* International 1/4-inch rule.

† Softwoods only.

Table 13.--*Net annual growth on commercial-forest land by species and kind of material*
Blue Grass Unit, Kentucky, 1963

Species	Growing stock			Sawtimber		
	Total	Poletimber trees	Sawtimber trees	Total	In sawtimber stands	In other stands
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.*	*Thousand bd. ft.*	*Thousand bd. ft.*
Softwoods:						
Shortleaf pine	200	--	200	1,680	400	1,280
Other yellow pines	1,170	560	610	5,490	3,650	1,840
Redcedar	1,390	870	520	4,360	1,200	3,160
Total softwoods	2,760	1,430	1,330	11,530	5,250	6,280
Hardwoods:						
Select white oak	3,490	1,960	1,530	15,820	5,540	10,280
Select red oak	840	460	380	3,310	2,010	1,300
Other white oak	1,290	780	510	6,050	2,800	3,250
Other red oak	2,910	1,870	1,040	10,530	4,680	5,850
Hickories	2,620	1,710	910	9,820	5,590	4,230
Hard maple	980	630	350	4,690	2,410	2,280
Beech	130	40	90	680	260	420
Black walnut	620	380	240	2,550	1,210	1,340
Ash	1,800	1,200	600	5,840	2,370	3,470
Soft maple	790	400	390	4,900	1,700	3,200
Sweetgum	90	30	60	700	310	390
Blackgum	160	100	60	480	410	70
Cottonwood	20	--	20	120	120	--
Yellow-poplar	1,090	350	740	3,740	2,500	1,240
Basswood	40	--	40	210	210	--
Other	4,990	3,500	1,490	13,720	4,250	9,470
Total hardwoods	21,860	13,410	8,450	83,160	36,370	46,790
All species	24,620	14,840	9,780	94,690	41,620	53,070

*International 1/4-inch rule.

Table 14.--*Net annual growth on commercial-forest land by county and species group*
Blue Grass Unit, Kentucky, 1963

County	Growing stock			Sawtimber		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd. ft.**	*Thousand bd. ft.**
Anderson	710	60	650	2,610	340	2,270
Bath	1,290	320	970	5,060	1,080	3,980
Boone	950	60	890	3,630	270	3,360
Bourbon	80	10	70	250	20	230
Boyle	510	40	470	2,060	210	1,850
Bracken	790	60	730	3,100	230	2,870
Campbell	540	40	500	1,940	200	1,740
Carroll	570	60	510	2,110	250	1,860
Clark	240	20	220	890	110	780
Fayette	100	--	100	310	10	300
Fleming	1,680	100	1,580	7,460	600	6,860
Franklin	970	90	880	3,410	320	3,090
Gallatin	380	40	340	1,450	190	1,260
Garrard	590	90	500	2,330	400	1,930
Grant	690	60	630	2,410	220	2,190
Harrison	730	70	660	2,660	160	2,500
Henry	960	110	850	3,380	360	3,020
Jefferson	810	110	700	3,150	460	2,690
Jessamine	270	20	250	1,140	90	1,050
Kenton	600	50	550	2,330	280	2,050
Lincoln	1,710	140	1,570	7,740	760	6,980
Madison	1,100	240	860	4,580	1,180	3,400
Mason	340	20	320	1,280	110	1,170
Mercer	300	30	270	1,000	150	850
Montgomery	440	60	380	1,610	250	1,360
Nicholas	460	50	410	1,690	170	1,520
Oldham	500	120	380	2,040	440	1,600
Owen	1,770	170	1,600	6,480	770	5,710
Pendleton	860	80	780	3,240	280	2,960
Robertson	260	20	240	870	80	790
Scott	500	30	470	1,890	140	1,750
Shelby	590	80	510	2,220	320	1,900
Spencer	540	110	430	1,970	470	1,500
Trimble	680	90	590	2,520	270	2,250
Washington	960	80	880	3,350	300	3,050
Woodford	150	30	120	530	40	490
Total	24,620	2,760	21,860	94,690	11,530	83,160

* International 1/4-inch rule.

Table 15.--*Timber cut from commercial-forest land by species and kind of material*
Blue Grass Unit, Kentucky, 1962

Species	Growing stock			Sawtimber
	Total	Poletimber trees	Sawtimber trees	Total
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**
Softwoods:				
Shortleaf pine	410	250	160	850
Other yellow pines	40	10	30	170
Redcedar	500	310	190	950
Total softwoods	950	570	380	1,970
Hardwoods:				
Select white oak	680	240	440	2,600
Select red oak	1,090	450	640	3,750
Other white oak	500	230	270	1,560
Other red oak	810	400	410	2,290
Hickories	730	400	330	1,790
Hard maple	150	80	70	420
Beech	240	80	160	1,080
Black walnut	1,580	40	1,540	10,810
Ash	110	70	40	270
Soft maple	30	--	30	190
Sweetgum	--	--	--	--
Blackgum	40	--	40	290
Cottonwood	10	10	--	10
Yellow-poplar	250	10	240	1,670
Basswood	60	--	60	350
Other	250	140	110	620
Total hardwoods	6,530	2,150	4,380	27,700
All species	7,480	2,720	4,760	29,670

* Intemational 1/4-inch rule.

Table 16.--*Timber cut from commercial-forest land by ownership and species group*
Blue Grass Unit, Kentucky, 1962

Ownership class	Growing stock			Sawtimber		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd. ft.**	*Thousand bd. ft.**
National forest	100	50	50	570	260	310
Other public	--	--	--	10	--	10
Forest industry	180	10	170	1,120	40	1,080
Farmer and miscellaneous private	7,200	890	6,310	27,970	1,670	26,300
All ownerships	7,480	950	6,530	29,670	1,970	27,700

* International 1/4-inch rule.

Table 17.--*Net annual desirable cut on commercial-forest land by species and kind of material*
Blue Grass Unit, Kentucky, 1963

Species	Growing stock			Sawtimber		
	Total	Poletimber trees	Sawtimber trees	Total	In sawtimber stands	In other stands
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd. ft.**	*Thousand bd. ft.**
Softwoods:						
Shortleaf pine	20	--	20	130	120	10
Other yellow pines	20	--	20	100	100	--
Redcedar	100	20	80	460	460	--
Total softwoods	140	20	120	690	680	10
Hardwoods:						
Select white oak	510	200	310	1,640	1,310	330
Select red oak	190	20	170	1,030	910	120
Other white oak	310	40	270	1,460	1,460	--
Other red oak	390	70	320	1,740	1,630	110
Hickories	600	120	480	2,800	2,790	10
Hard Maple	50	20	30	210	160	50
Beech	40	--	40	200	200	--
Black walnut	50	10	40	180	180	--
Ash	110	40	70	510	460	50
Soft Maple	170	40	130	660	660	--
Sweetgum	--	--	--	10	10	--
Blackgum	70	20	50	260	260	--
Cottonwood	40	--	40	300	300	--
Yellow-poplar	270	70	200	940	590	350
Basswood	20	--	20	90	90	--
Other	320	100	220	1,050	890	160
Total hardwoods	3,140	750	2,390	13,080	11,900	1,180
All species	3,280	770	2,510	13,770	12,580	1,190

*International 1/4-inch rule.

Table 18.--*Net annual desirable cut on commercial-forest land by county and species group*
Blue Grass Unit, Kentucky, 1963

County	Growing stock			Sawtimber		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
	Thousand cu. ft.	*Thousand cu. ft.*	*Thousand cu. ft.*	*Thousand bd. ft.**	*Thousand bd.ft.**	*Thousand bd. ft.**
Anderson	80	--	80	330	10	320
Bath	380	40	340	1,570	160	1,410
Boone	120	--	120	490	10	480
Bourbon	10	--	10	30	--	30
Boyle	60	--	60	290	--	290
Bracken	100	--	100	410	10	400
Campbell	60	--	60	250	10	240
Carroll	60	--	60	280	10	270
Clark	30	--	30	130	10	120
Fayette	10	--	10	30	--	30
Fleming	240	--	240	1,190	10	1,180
Franklin	120	10	110	470	20	450
Gallatin	40	--	40	190	10	180
Garrard	80	10	70	300	20	280
Grant	80	--	80	310	10	300
Harrison	80	--	80	360	10	350
Henry	110	10	100	420	30	390
Jefferson	100	10	90	420	30	390
Jessamine	120	--	120	150	--	150
Kenton	70	--	70	290	10	280
Lincoln	250	10	240	1,240	20	1,220
Madison	120	10	110	580	80	500
Mason	30	--	30	140	--	140
Mercer	30	--	30	120	--	120
Montgomery	50	--	50	220	10	210
Nicholas	50	--	50	210	10	200
Oldham	60	10	50	310	40	270
Owen	210	10	200	830	50	780
Pendleton	100	--	100	450	10	440
Robertson	20	--	20	90	--	90
Scott	60	--	60	250	10	240
Shelby	80	10	70	310	30	280
Spencer	60	10	50	230	40	190
Trimble	80	--	80	330	10	320
Washington	110	--	110	490	10	480
Woodford	20	--	20	60	--	60
Total	3,280	140	3,140	13,770	690	13,080

* International 1/4-inch rule.

THE AUTHORS

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